

(11) Publication number:

02037326 A

Generated Document.

## PATENT ABSTRACTS OF JAPAN

(21) Application number:

63187399

(51) Intl. Cl.: G02F 1/1343 G02F 1/1335

(22) Application date:

27.07.88

(30) Priority:

(43) Date of application

publication:

07.02.90

(84) Designated contracting

states:

(71) Applicant: NIPPON SHEET GLASS CO LTD

(72) Inventor: NISHIKAWA SHOZABURO

**HARA ISAO** 

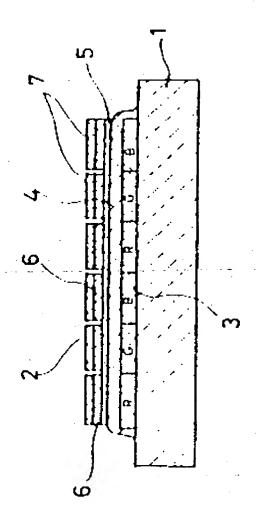
(74) Representative:

## (54) TRANSPARENT SUBSTRATE FOR COLOR LIQUID CRYSTAL DISPLAY

(57) Abstract:

PURPOSE: To obtain a transparent conductive layer which is thin and has low area resistance and to allow fine patterning without generating side etching and without generating thinning and meandering by using the transparent conductive layer to be provided on a color filter layer to serve as colored picture elements after said layer is sandwiched by metal oxide layers.

CONSTITUTION: This substrate consists of the transparent substrate 1, the color filter layer 3 which is formed on the surface of the substrate 1-and to serve as the colored picture elements, and the transparent conductive layer provided on the layer 3. The transparent conductive layer is formed to have the 3-layered structure consisting, successively form the filter layer 3 side, of the 1st layer 5 which is the metal oxide layer, the 2nd layer 6 which is the acid soluble metal or its alloy layer and the 3rd layer 7 which is the acid soluble metal oxide layer. The transparent conductive layer having the low area resistance is obtd. and the etching is executable in a relatively short period of time by adopting the acid soluble metal oxide 7 for the outermost layer. The glass substrate for color liquid crystal display having the transparent conductive layer which allows easy fine patterning of the



-conductive film and has the low resistance is obtd. in this way.

COPYRIGHT: (C)1990,JPO&Japio